A NEW SPECIES OF LEPIDOSPERMA[N.O. CYPERA-CEÆ] FROM THE PORT JACKSON DISTRICT; WITH SOME MISCELLANEOUS BOTANICAL NOTES.

By A. A. HAMILTON.

LEPIDOSPERMA FORSYTHII, n.sp.

Centennial Park, in swamps; flowers in April; fruit in August, 1902(A. A. Hamilton).

A tufted spreading herb with a short rhizome. Stems 3 to 5 ft. long, comparatively slender, obtusely angular, finely striate, occasionally grooved. Leaves reduced to long, loose, broad, scarious sheaths with a lamina scarcely 1 in, long (short for the genus). Panicle about 13 in. long, spreading, much branched, the rhachis very flexuose as in L. flexuosum R.Br. Sheathing bract of the panicle about 1 in, long. Bracts of the paniclebranches and spikelets gradually shorter, all obtuse but with a short lamina. Glumes obtuse, the midrib produced into a conspicuous point. Spikelets 4 to 5 lines long. The young inflorescence pale brown, growing darker with age. Barren and fertile flowers as in the genus. Nuts obovoid, with three flattened ribs, broadly contracted at the base, finely reticulate, not shining, reddish when young, the colour gradually fading as the fruit matures. Scales irregular, frequently all on one side of the nut, longer, narrower, and more lax than in L. flexuosum.

Planta cæspitulosa, diffusa, herbifera; rhizoma brevi. Calami 1-1·5 m. alti, comparative graciles, obtuse angulati, tenuissime striati, nonnunquam canaliculati. Folia attenuata ad longas latas laxas scariosas vaginas, lamina circiter 1·3 c.m. longa. Panicula circiter 3·8 c.m. longa, diffusa, ramosissima, axe tam flexuoso quam in *L. flexuoso* R.Br. Bractea amplectans paniculæ circiter 2·5 c.m. longa. Bracteæ ramorum, panicularum spiculorumque gradatim breviores, omnes obtusæ at lamina brevi.

Glume obtuse, costa elongata ad manifestum apicem. Spicula 8-9 mm. longa. Inflorescentia immatura fusca-pallida, maturitate atrior. Flores steriles fertilesque tamquam in genere. Nuces obovoidee, costis tribus, complanatis, hasi attenuate, delicatissime reticulate, non nitide, immaturitate rubentes, maturitate gradatim decolorantes. Squame incomposite, sepe omnes in unum, longiores, angustiores, laxiores quam in L. flexuoso R. Br.

Allied to *L. flexuosum* R.Br., and *L. carphoides* F.v.M. The former differs in having the stems terete, not grooved; leaf-sheaths closely appressed, with a long lamina; points of the bracts of the panicle-branches, spikelets, and glumes inconspicuous; nuts oblong, smooth, shining, brown-mottled; scales short, broad, appressed; the whole plant smaller and less robust.

L. carphoides differs in the appressed leaf-sheath with long lamina; fruit obtusely angular, strongly reticulate; scales almost regular, standing out from the attenuate base of the nut; panicle spike-like, the branches not flexuose.

This plant was first discovered in a swamp in the Centennial Park, in March, 1897, by Mr. W. Forsyth, a Member of this Society, who forwarded specimens to the National Herbarium. On examining the material, it was found that there were no mature fruits (which furnish an important character in the genus). A provisional description was prepared, and laid aside with the specimens, awaiting more advanced nuts. Later, the writer collected fruiting specimens in the same locality. While working recently on Cyperaceous plants, particularly Lepidosperma, I prepared some notes on this species which were forwarded, with complete botanical material, to Mr. Maiden, who later on returned them, accompanied by the "Herbarium Notes," which he generously placed at my disposal. The plant appears to be confined to the above locality. The name is proposed in compliment to the discoverer. The type-specimens will be presented to the National Herbarium.

TRICOSTULARIA PAUCIFLORA Benth.

Leura(A. A. Hamilton; November, 1909). New for New South Wales.

Some difficulty was met with in the determination of this plant, owing to an inadvertent reference of the species to Lepidosperma filiforme Labill., by Sir J. D. Hooker, in his "Flora of Tasmania" (Vol. ii., 93). See note on Tricostularia pauciflora Benth., Fl. Austr., vii. 383. This reference has evidently been followed by Mr. Archer in the placing of Tasmanian specimens of T. pauciflora Benth., (now in the National Herbarium, Sydney) under Lepidosperma filiforme Labill

References.—Chapelliera pauciflora Nees, fid. Mueller, Hooker's Fl. Tasm. ii., 93; Schænus pauciflorus F.v.M., Syst. Census of Austr. Plants, p.128, 1882; Chapelliera pauciflora Nees; Tricostularia pauciflora Benth., = Lepidosperma pauciflorum F.v.M., Index Kewensis.

Hab.—"Victoria: near Mt. Abrupt, F. Mueller; near Mt. William, Sullivan" [Fl. Austr. p. 383]. Mr. W. Forsyth has collected specimens of this plant at La Perouse (November, 1899); and we have, in the National Herbarium, specimens from Sutherland, (November 14th, 1900) and French's Forest (September, 1908), collected by Mr. J. L. Boorman.

Note on Cyperacee.—In determining Cyperaceous plants, the characters, colour of the fruits, and height of the plants, are occasionally used to distinguish a species, or separate a genus into groups. Of the former character it is noticed, that the fruits of several species are coated, when young, with a "pale" membranous testa, which persists for a lengthy period, finally withering, and exposing the "dark" nuts. In reference to the latter, we find plants placed under a group 1 to 3 in. high, attaining a height of 6 to 9 in., which would qualify them for inclusion in a different group.

Three Cyperaceous plants from the Blue Mountains hitherto regarded as coastal—

SCHOENUS MOOREI Benth.

Mount Wilson(J. Gregson; November, 1901); Wentworth Falls(J. H. Maiden; September, 1898); Leura(A. A. Hamilton; November, 1909).

LEPIDOSPORA TENUISSIMA, F.v.M.

Leura(A. A. Hamilton; November, 1909).

HELEOCHARIS MULTICAULIS Sm.

Katoomba(A. A. Hamilton; March, 1910.)

Miscellaneous notes, new records, &c.

Persoonia Chamæpeuce Lhotsky.

Near Narrabeen (A. A. Hamilton; June, 1908). Not recorded in Dr. Woolls' "Plants indigenous in the Neighbourhood of Sydney."

ACACIA ASPARAGOIDES Cunn.

Medlow(A. A. Hamilton); flowers in October; fruit in December, 1907. Only one locality is given for this plant in the Fl. Austr., "Rare on the rocky verge of Regent's Glen, Blue Mountains." . . . "Pod unknown." It is plentiful on both sides of the Bathurst Road, from Medlow to Blackheath; and we have specimens, in the National Herbarium, from Clarence Siding(J. H. Maiden; September, 1898); and Mount Wilson(J. Gregson; September, 1901). The pod is more or less constricted between the seeds, about 1 line broad. Seeds longtitudinal, the funicle slightly folded and filiform, as in A. juniperina Willd.

PULTENÆA GLABRA Benth.

Leura Falls(A. A. Hamilton; December, 1907). Recorded from the Blue Mountains without specific locality. It is common, in swamps, from Hazelbrook to Katoomba.

GNAPHALIUM JAPONICUM Thunb., var. RADICANS F.v.M., MS.

Leura (A. A. Hamilton; November, 1909). Previously recorded from the Munyong Mountains, Vic., F.v. Mueller; and Mt. Koscuisko, tree-line to 7000 ft. (J. H. Maiden and W. Forsyth; January, 1899). See these Proceedings, 1899, p.148.

CHENOPODIUM NITRARIACEUM, F.V.M. ATRIPLEX LEPTOCARPUM, F.V.M.

George's River(A. A. Hamilton; November, 1909). Two Salsolaceous plants, known as interior species, which have found their way to the coast probably through the agency of travelling stock.

ASTROLOMA HUMIFUSUM R.Br.

Mt. Victoria(A. A. Hamilton; April, 1908). This species has not been recorded from the Blue Mountains.

PANICUM GRACILE R.Br.

Stanwell Park (A. A. Hamilton; June, 1909). A degraded form of *P. gracile* R. Br., with the panicle-branches reduced to a single spikelet, the rhachis produced into a point longer than the spikelet.

CYPERUS TRINERVIS, R.Br.

Carlingford (A. A. Hamilton; April, 1909, and Fairfield, May, 1909). Not mentioned in Dr. Woolls' "Plants indigenous in the Neighbourhood of Sydney."